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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/597,146	07/13/2006	Raymond Joseph Elisabeth Habets	NL040071	6749

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EXAMINER	
BITAR, NANCY	

ART UNIT	PAPER NUMBER
2624	

NOTIFICATION DATE	DELIVERY MODE
08/18/2011	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No.	Applicant(s)
	10/597,146	HABETS, RAYMOND JOSEPH ELISABETH
	Examiner	Art Unit
	NANCY BITAR	2624

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *16 May 2011*.

2a)☒ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☐ Claim(s) *1-6,9 and 12-18* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-6,9,12-14,16-18* is/are rejected.

7)☒ Claim(s) *15* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *07 January 2009* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's response to the last Office Action, filed 02/15/2011, has been entered and made of record.

2. Claims 1-6, 9, 12-18 are currently pending.

3. Applicants arguments filed 5/16/2011 have been fully considered but they are not persuasive.

4. Applicant argues that neither Piet not Wood alone or in combination disclose or suggest " attaching a dynamic measurement object to a first graphic.....the dynamic measurement object including measurement data related to the first graphic object" and "detaching the dynamic object from the first graphic object and attaching the dynamic measurement object to a second graphic object.....wherein the measurement data is modified to be related to the second graphic object"

In response, Piet teaches A measurement template containing a set of measurement points, which graphically represents relation between measurement entities and radiological anatomy, is retrieved and displayed adjacent to the digital image. The measurement points in the template are mapped on to the displayed image to perform geometrical measurements on the image. Pet et al uses the user interface that consists of a database, a controller and a graphics part. The controller reacts to events such as the user pressing a mouse button or running a dialog box, starting a

command, addition of an object to the database, notification and modification of objects that other objects onto which they are based have changed etc. (i.e. modification) (see figure 2, paragraph [0033-0035]). Examiner used a secondary reference Wood et al that teaches attaching via the user interface device the dynamic measurement object to a second graphic object displayed on the monitor wherein the measurement data modified to be related to the second graphic object.Wood teaches in paragraph[0056] and [0071]) the first display and second display are related to one another wherin the second display to use a horizontal line as shown in FIG. 5 to highlight on the volumetric view the relative location of a computer or physician detected region of interest shown in the first display. As various images are rendered in the first display, the location of the horizontal line in the image in the second display will correspondingly change in response thereto. The first display may also be responsive to inputs made in the second display. For example, in one approach the image rendered in the first display can be a CT section selected by moving a reference plane in the second display. The third display can similarly be linked to the first and/or second displays so that each of the first, second and/or third displays is related and is responsive to inputs received by any other display. It would have been obvious to one skilled in the art to use the automated measurement of Wood in the second object interaction in Plet, et al, and to do so would at least enhance the diagnostic value of the CT scans as well as enable the diagnostic determination by a radiologist in an economically reasonable time to assist the physician in the effort to detect cancer at its earliest and most curable stage. Therefore, the claimed invention would have been obvious to one of ordinary skill in the art at the time of the invention by applicant. All remaining arguments are reliant on the aforementioned and addressed arguments and thus are considered to be wholly addressed herein.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 1-6, 9, 12-14,16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Plet et al (EP 1349098) in view of Wood et al (US 2003/0095697)

As to claim 1, Plet et al teaches a method of processing user interaction in a medical environment with a medical image for producing measurement data related to graphics on the medical image, (figure 2, paragraph [0095-0098]), the method comprising: attaching a dynamic measurement object including measurement data related to the first graphic object (In one embodiment, all user-requested measurement points are mapped prior to generating the measurement objects that depend on them. All measurement objects are highlighted on the digital sketch upon which a copy of the object is generated and the user is requested to drag and adjust the copy to its corresponding position in the actual radiographic image. When all measurement points are available, the depending measurement objects are generated and the result of the measurement operators is computed, paragraph [0062]); detaching via a user interface device the dynamic measurement object from the first graphic object (paragraph [0033-0035]; note that Plet et al teaches the anchor point mapping and the geometric mapping). While Plet meets a number of the limitations of the claimed invention, as pointed out more fully above,

Plet fails to specifically teach attaching via the user interface device the dynamic measurement object to a second graphic object displayed on the monitor wherein the measurement data modified to be related to the second graphic object.

Specifically, Wood et al. teaches receiving a tomographic data obtained from a digital imaging apparatus wherein said tomographic data is displayable in a first portion of a display as one or more two-dimensional tomographic sections of a sequence of two-dimensional tomographic sections; determining a third dimension from the sequence of two-dimensional tomographic sections to create a first volumetric view wherein said first volumetric view is displayable in a second portion of the display; determining a second volumetric view of a selected feature shown in the first or second portion wherein said second volumetric view is displayable in a third portion of the display; and rendering one or more of said first, second or third portions of the display. Wood et al clearly teaches the measurement button can enable various other functionality, for example, a measurement function can be activated by a click-and-drag activation wherein the cursor can be placed in the first display 510, second display 520 or third display 530, and when the mouse is clicked and held, the cursor can be dragged within the display and a measurement calculated representing the distance covered by the cursor within the display. Additionally, the measurement can be automated. For example, in the third display 530, measurement data such as nodule diameter, volume, average intensity level and maximum intensity level can be displayed as data 950 (FIG. 9B) for a selected or highlighted nodule 9 paragraph[0071]; figures 9A-C). Therefore, it would have been obvious to one of ordinary skill in the art to use the measuring button of Wood in the second object interaction in Plet, et al, and to do so would at least enhance the diagnostic value of the CT scans as well as enable the

diagnostic determination by a radiologist in an economically reasonable time to assist the physician in the effort to detect cancer at its earliest and most curable stage. Therefore, the claimed invention would have been obvious to one of ordinary skill in the art at the time of the invention by applicant.

As to claim 2, Plet et al teaches the method according to claim 1, wherein the user interface device is cursor controlled and the medical image and first and second graphics object is displayed on the monitor of a medical examination apparatus (display, figure 1, the enhanced placement mode is achieved by hinting the user as to the position of a constituent point of a measurement object by confining the placement to a set of points or objects defined by the graphical construction defined so far. These set of geometric objects are called the geometric loci of a geometric problem, paragraph [0068-0074]).

As to claim 3, Plet et al teaches the method according to claim 1, wherein the first and second graphic object are associated with at least one anatomical structural element of medical objects on said medical image (In this representation the anatomy is schematically depicted as a collection of outlines of bone and other radiologically well-manifested landmarks. The measurement objects are drawn superimposed onto the anatomical outlines, paragraph [0045]).

As to claim 4, Plet et al teaches the method according to claim 1, wherein the measurement data is derived from the first and second graphic object (paragraph [0054-0055]).

As to claim 5, Plet et al teaches the method according to claim 4, wherein the graphic object is a point, a line, a curve, two intersecting lines, or a contour (line, circle, ellipse, analytic curve, paragraph [0050]).

As to claim 6, Plet et al teaches the method according to claim 4, wherein the measurement data that is derived from the first and second graphics object is a line length, a curve length, an angle delimited by two intersecting lines, an area delimited by a contour or a profile along a line or a curve, a diameter, a perimeter, an area, a volume, or grey value profiles (figure 3; pure measurement operation and arithmetic measurement operations, paragraph [0050-0053])

As to claim 9, Plet et al teaches the method according to claim 1 wherein the attaching the dynamic measurement object to the first and second graphic objects further comprising determining a nearest one of the first and second graphic objects supporting a specific measurement associated with the dynamic measurement object (paragraph [0045]; Setting snap to lines or other graphical entities has a similar effect: e.g. the line tangent to a circle (there are two such lines) through a given point is selected when moving the cursor nearest towards the intended tangent point, and a mouse click will teleport the cursor onto that tangent point on the circle, after which drawing of the tangent line completes the drawing of the line measurement object, paragraph [0050-0052); paragraph [0071]).

The limitation of claims 12-14 has been addressed in claims 1-5 see paragraph [0050-0053]).

As to claims 16-18, Plet teaches the method according to claim 1, wherein the first and second graphic are contour curves and the length of the contour curves (figures 2 and 3)

Allowable Subject Matter

6. Claim 15 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to NANCY BITAR whose telephone number is (571)270-1041. The examiner can normally be reached on Mon-Fri (7:30a.m. to 5:00pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vikkram Bali can be reached on 571-272-7415. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Nancy Bitar/
Examiner, Art Unit 2624

/VIKKRAM BALI/

Supervisory Patent Examiner, Art Unit 2624